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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008,453	12/05/2001	David Paul Bajorins	004524.P067	4978

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EXAMINER

DOAN, JENNIFER

ART UNIT	PAPER NUMBER
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2874

DATE MAILED: 03/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/008,453

Applicant(s)

BAJORINS ET AL.

Examiner

Jennifer Doan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-18, 21-33 and 39-42 is/are allowed.
- 6) ☒ Claim(s) 19, 20, 34 and 37 is/are rejected.
- 7) ☒ Claim(s) 35, 36 and 38 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings, filed on 12/05/2001, are accepted.

### ***Specification***

2. Applicants' cooperation is requested in correcting any errors of which applicants may become aware in the specification.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 19, 34 and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Solinsky (U.S. Patent 5,142,400).

Regarding claim 19, Solinsky discloses (in figures 1-3) an integrated optical component comprising a monolithic optically-translucent substrate (abstract, lines 22-26) in which a plurality of optics are formed, including a receiver optic (14) having a first focal point (24) and configured to receive a substantial portion of an incoming optical beam and direct the optical beam toward the first focal point; and a plurality of

transmitter optics (12) (column 4, line 67), each having a respective focal point (22) and configured to receive light emitted from a respective light source disposed proximate to the respective focal point and direct the light outward as a respective outgoing optical beam as shown in figures 1 and 3.

Regarding claims 34 and 37, Solinsky discloses a method for controlling a position of a free space optical (FSO) transceiver comprising directing a portion of an incoming optical signal received by a monolithic integrated optic component disposed in the FSO transceiver towards a optical beam position sensor using a plurality of optics defined in the integrated optic component; further directing respective portions of an incoming optical signal received by a monolithic integrated optic component disposed in the FSO transceiver towards a total internal reflection (TIR) combiner defined in the integrated optic component using a plurality of optics defined in the integrated optic component; redirecting the respective portions of the incoming optical signal via the TIR combiner toward a optical beam position sensor; determining a positional error based on data provided by the optical beam position sensor; and adjusting a position of the FSO transceiver based on the positional error (column 1, lines 35-46 and column 3, line 47- column 4, line 13).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Solinsky (as cited above).

Solinsky discloses all the limitations of the claimed invention except for the plurality of tracking transmitter optics being radially disposed about at substantially evenly spaced angles. However, this feature is considered to be obvious, since disposing the plurality of tracking transmitter optics at evenly spaced angles has no mechanical effect on the transceiver device; thus, it would not substantially change the function of the optical transceiver. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Solinsky device with the setting of the tracking transmitter optics. Doing so would be desirable to obtain the optical transceiver with more reliable.

***Allowable Subject Matter***

8. Claims 35, 36 and 38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claims 1-18, 21-33 and 39-42 *are allowed*.

The prior art fails to disclose or reasonably suggest a method and an apparatus of an integrated optical component and a free space optical transceiver having a pickoff lens having a third focal point and configured to receive a tracking portion of the incoming optical beam and direct the tracking portion towards the third focal point and a first fold mirror configured to receive the tracking portion of the light beam and redirect it toward a first predetermined direction; wherein directing a portion of a first incoming optical signal is received by a first integrated optic component disposed in the second FSO transceiver towards a first optical beam position sensor using a plurality of optics defined in the integrated optic component.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bastable et al. (U.S. Patent 4,807,987), Owen, Jr. et al. (U.S. Patent 5,204,774), Miller et al. (U.S. Patent 6,031,662) disclose a binocular device. Arends (U.S. Patent 4,330,870), Wissman et al. (U.S. Patent 4,932,775), Solinsky (U.S. Patent 5,060,304), Mayeux (U.S. Patent 5,390,040), Maus (U.S. Patent 5,619,006),

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Sekowski et al. (U.S. Patent 6,052,190), Javitt et al. (U.S. Patent 6,381,055) and Okorogu (U.S. Patent 6,597,476) disclose a transceiver in free space optical networks.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Doan whose telephone number is (571) 272-2346. The examiner can normally be reached on Monday to Thursday from 6:00 am to 3:30 pm, second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Jennifer Doan*

JD  
March 2, 2004

*John D. Lee*  
John D. Lee  
Primary Examiner